

**From:** Strickland, Chrystal [CStrickland@adem.alabama.gov]  
**Sent:** 7/26/2017 8:44:04 PM  
**To:** Pena-Molina, Ana [pena-molina.ana@epa.gov]  
**Subject:** RE: ORCR Summer Interns Project Regarding OB/OD Sites-Alabama

Ana,

I do not have information for the Ft. McClellan and Hindman sites. I will forward this on to other project managers. Having information back to you in three days is not likely if detailed investigation is required for these two sites.

However, I am the project manager for Anniston Army Depot and am familiar with the OB2 unit. I will attempt to answer the questions you have on this unit, but there are good notes on the unit details in RCRA Info as well. The OB #2 was discovered during the last RFA at the facility in 2007. During the investigation phase, historical research indicates that it was in operation for approximately 4 months from 1985 to 1986. This area was merely a road where they open burned 90mm rounds for the operating period described. This area has been inactive since 1986 and is awaiting RCRA Clean Closure.

**Inactive/Closing, but Not Yet RCRA Closed (IN) and Corrective Action and Superfund (CA, SF) Facilities' questions:**

1. Are these units seeking to clean close? The OB2 Unit at ANAD is seeking clean closure by conducting a RM-2 risk evaluation in accordance with Alabama Risk Based Corrective Action (ARBCA) guidance.
2. If so, what criteria is being used to attempt clean closure (e.g., EPA action levels)? Site Specific clean up goals are being determined by the risk assessment.
3. What was the volume of waste disposed, frequency (e.g., daily, weekly, monthly, periodically), and years of operation? This information is found in the unit details of RCRAInfo. The volume of waste disposed was 4000 total 90mm munitions.
4. Was it OB or OD or both? OB
5. What sampling procedures are being used to identify the extent of the contamination, including kick-out and fallout (e.g., geophysical techniques used to identify buried munitions and fragments; trenching; grid, spokes, meandering way, visual, or random sampling of soil/for kick-out; depth; until no more found; and ground water monitoring)? This OB operation did not have kick out because the munitions were cracked and burned. Soil and groundwater sampling has been conducted to determine the extent of contamination in these media.
6. Were components of the unit removed (e.g., any platforms, pans, pads, and liners)? There were no components of this unit as it was conducted on the ground.
7. What clean-up procedures and techniques are being used to clean up the contaminants (e.g., excavation, soil sifting)? At this time clean up measures have not been determined.
8. What data is being recorded and metrics being used to evaluate the extent and levels of contamination? Historical soil sampling and groundwater sampling data is being used to determine extent. At this time consecutive groundwater monitoring events have not been successful to complete the risk analysis.
9. What is the total cost to date to remediate the site? The cost to date would be the cost of groundwater monitoring events, soil sampling and preparation of reports by the contractor. The state has not required a cost evaluation to be submitted, as this is not a Superfund cleanup.

It appears on the table listed below that the Units and the Unit Detail Sequence headings are incorrect for OB2. The Sequence detail for OB2 is 33 and there is only one unit.

Please let me know if you require more information on this unit. OB2 is so small that I'm not sure it will provide any benefit like the clean closure of long term operating units. More information about the closure of this unit will not be available until the GW monitoring events are completed.

Thanks.

*Chrystal Strickland*

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**Subject:** ORCR Summer Interns Project Regarding OB/OD Sites-Alabama

I am writing to seek information on the closure status of the Open Burn/Open Detonation (OB/OD) units listed below to assist ORCR in a new project to assess closure of OB/OD units. With this information, EPA will be able to identify, evaluate, and document procedures, techniques, and criteria to assess, clean up, and close OB/OD units/sites in a standardized manner.

EPA has been documenting soil and ground water contamination from OB/OD units and the costs to clean them up. Given the inordinate extent of contamination and costs of clean-up that have been reported, we are now seeking to learn more about the monitoring, clean-up procedures, successes, and costs of these efforts. There is currently no national guidance on procedures to assess, monitor, and clean up OB/OD sites, nor metrics to achieve clean closure of OB/OD units. We are requesting information on the clean closure (CC) of OB/OD sites to assist us.

Please first verify the following codes for your appropriate facilities in Alabama.

**Alabama**

FACILITY_ID	FACILITY_NAME	UNIT_NAME	UNITs	UNIT_DETAIL_SEQ	legal status	operating status	EFFECTIVE_DATE
AL8213700000	US ARMY GARRISON FT MCLELLAN PELHAM RAN	OB/OD	1	2	IS	CC	20020930
ALR000008649	HINDMAN SALVAGE & RECYCLING	WIRE BURN AREA	1	2	NN	CC	20131022

AL3210020027	ANNISTON ARMY DEPOT	OB2	33	1	IS	IN	19881107
AL3210020027	ANNISTON ARMY DEPOT	OB2	33	1	IS	IN	19881107

### Questions:

We have a number of questions we hope you can answer regarding your clean closed/closing sites. The operating status of the facilities will determine which sets of questions are to be answered. We understand that some of this data may be difficult to find but we would really appreciate if you could dig it up for us as it will help us move forward with this project and eventually help EPA update OB/OD closing procedures.

### Clean Closed (CC) Facilities' questions:

1. Did these sites complete clean closure or are they still in the process of seeking to clean close?
2. Did the state officially certify/approve the unit(s) Clean Closed (CC)?
3. What was the volume of waste disposed, frequency (e.g., daily, weekly, monthly, periodically), and years of operation?
4. Was it OB or OD or both?
5. What sampling procedures were used to identify the extent of the contamination, including kick-out and fallout (e.g., geophysical techniques used to identify buried munitions and fragments; trenching; grid, spokes, meandering way, visual, or random sampling of soil/for kick-out; depth; until no more found; and ground water monitoring)?
6. Were components of the unit removed (e.g., any platforms, pans, pads, and liners)?
7. What clean-up procedures and techniques were used to clean up the contaminants (e.g., excavation, soil sifting)?
8. What data was recorded and metrics used to evaluate the extent and levels of contamination?
9. What criteria was used to certify clean closure (e.g., EPA action levels)?
10. What was the total cost to achieve Clean Closed (CC) status?

### Inactive/Closing, but Not Yet RCRA Closed (IN) and Corrective Action and Superfund (CA, SF) Facilities' questions:

1. Are these units seeking to clean close?
2. If so, what criteria is being used to attempt clean closure (e.g., EPA action levels)?
3. What was the volume of waste disposed, frequency (e.g., daily, weekly, monthly, periodically), and years of operation?
4. Was it OB or OD or both?
5. What sampling procedures are being used to identify the extent of the contamination, including kick-out and fallout (e.g., geophysical techniques used to identify buried munitions and fragments; trenching; grid, spokes, meandering way, visual, or random sampling of soil/for kick-out; depth; until no more found; and ground water monitoring)?
6. Were components of the unit removed (e.g., any platforms, pans, pads, and liners)?
7. What clean-up procedures and techniques are being used to clean up the contaminants (e.g., excavation, soil sifting)?
8. What data is being recorded and metrics being used to evaluate the extent and levels of contamination?
9. What is the total cost to date to remediate the site?

We plan to have a contractor gather this information on a select number of sites from the states. The purpose of this current effort is to gather information on the status of cleanup at these sites to help us identify which sites have the best information for our contractor to follow up with. Thus, for this effort, we seek answers to questions 1-4 and the last

question in each set, and for the remaining questions we seek whether or not good information exists to answer these questions. We hope to receive this information by July 31<sup>st</sup>. Thank you for taking time to assist us with this project. If you have any questions please feel free to reach out to us. Any information that you may be able to provide will be helpful in our project. Sincerely,

Ana Pena-Molina  
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